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ABSTRACT

This paper provides background information on school desegregation in Springfield, Massachusetts, and describes a study that compared the academic achievement of two groups of black elementary school students: one group who was mandatorily bused to a previously white school, and the other who walked to their neighborhood school which was desegregated by the assignment of white students from other neighborhoods. The students who walked to desegregated schools were found to have higher achievement gains than were those who were bused. After examining a number of student and school factors that may have influenced the results, it is concluded that black achievement can be stimulated more by busing white students to formerly black schools than by busing black students to formerly white schools. (Author/MK)

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Walking or Riding: Does it Make a Difference in Black Student Achievement?

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Springfield Public Schools

Running Head: Walking or Riding

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Abstract

The achievement of Black students who were manditorily bused to a previously white school was compared to the achievement of Black students who walked to their neighborhood school which was desegregated by the assignment of white students from other neighborhoods. The results favored the students who walked to school.

The study examined a number of school factors and student factors that may have influenced the results. The conclusion was reached that Black achievement can be stimulated more by busing white students to formerly Black schools than busing Black students to formerly white schools.

Walking or Riding: Does it Make a Difference in Black Student Achievement?

In the fall of 1974, the Springfield Public Schools instituted a desegregation plan for the elementary schools in the city. The Six District Desegregation Plan (SDDP) called for two-way busing and was imposed by Massachusetts Supreme Judicial Court order. Over one third of the elementary students were manditorily bused to school, many for the first time. Threats of violence, boycotting, and sit-ins disappeared as the first day saw orderly peaceful attendance by over 92% of the students enrolled. One child spent the first day at the wrong school by getting on the wrong bus; it was the only instance of mishap that day.

This is a study comparing the achievement of bused to non-bused Black students, both groups participating in desegregation. This study of comparative achievement can perhaps be better understood within the context in which the desegregation occurred. A brief history of the desegregation efforts in Springfield, Massachusetts is presented to help build a context within which the variables of change can be better viewed.

Springfield, the third largest city in Massachusetts, is located in the Connecticut River Valley with a reasonable mixture of homes (43%) and industry (34%). Springfield has a slowly declining population, losing over 10,000 persons from a population of 174,463 in 1960 to 163,905 in 1970.

Springfield has had an increasing number of minority residents. Black population nearly doubled from 13,363 in 1960 to 21,387 in 1970. The proportion of Black students has risen every year from 1968 through 1978 as shown in Table 1, declining slightly in 1979. The increase slowed after the implementation of the SDDP with parents expressing the view that the reality of the plan was far less burdensome than previously feared.

Insert Table 1 about here

One of the factors which undoubtedly contributed to the success of the September, 1974 desegregation effort was the fact that all of the secondary schools in the city of Springfield were desegregated by September of 1968. The thematic high schools have always been desegregated through open enrollment. Another important factor was the prior experience in limited or voluntary desegregation in which some students had participated, desegregation that was implemented in 1966.

The Springfield Public Schools consists of four high schools, six junior highs and thirty-six elementary schools. The Educational Planning Associates concluded in 1972 that as many as 22 of the city's 36 elementary school facilities were becoming substandard. Five schools were closed to regular programs by 1976. A modern elementary school, New North, was opened in 1975. All four high schools are located relatively near one another in the downtown area of the city. All are and always have been integrated under voluntary open enrollment policy, each has a specialized curriculum.

Policy for Springfield Public Schools is determined by seven elected School Committee Members of which six are elected at-large with the seventh being the mayor. The committee hires a staff of school administrators and nearly 1800 teachers.

Public school enrollment peaked at 31,770 in 1967 and steadily declined to 28,767 in 1974 and to 25,503 by 1979. Parochial enrollment of about 7,000 also declined in this period to just over 5,000 pupils.

Desegregation History

The history of desegregation in Springfield began when Chapter 641 of the Acts of the Commonwealth of Massachusetts was approved as an emergency act on August 18, 1965. The following excerpts of Section 37D define the intent of the act:

> The school committee of each city, town and district shall, annually, at such time and in such form as the commissioner shall determine, submit statistics sufficient to enable a determination to be made of the percent of non-white pupils to all public schools. Whenever the State Board of Education finds that racial imbalance exists in a public school it shall notify in writing the school district committee having jurisdiction over such school, and that school committee shall thereupon prepare a plan to eliminate such racial imbalance and file a copy of such plan with the board. The term "racial imbalance" refers to a ratio between non-white and other students in public schools which is sharply out of balance with the racial composition of the society in which non-white children study, serve and work.

Under the law, the Springfield Public School System was found to have a number of racially imbalanced schools and on April 1, 1966, in compliance with Chapter 641, the Springfield School Committee submitted a plan to promote racial balance and correct racial imbalance in the public schools. The plan included the following specific steps which were implemented in the school year 1966-67:

1. Change six elementary District Lines designed to place Black students in predominantly white school districts.
2. Change three Junior High District Lines to include students who attend Buckingham Junior High School, a predominantly Black school.

3. Plan construction of the Brightwood North End Elementary Community (New North) School and the Construction of an addition to Van Sickle Junior High.
4. Institute open enrollment
5. Recruit volunteer Black children to attend school in the suburbs (METCO).

accomplishing all that had been anticipated, the plan made some progress in providing racially integrated education. The number of racially imbalanced schools was reduced from seven to six. At Buckingham Junior High School, two hundred fifty-six (256) Black pupils were transferred to five different junior high schools. At the elementary school level one hundred sixty-three (163) Black elementary school pupils were assigned to predominantly white schools.

A "Second Plan" was submitted in September 1967, and was implemented in the school year 1967-68. It contained the following:

1. Additional changes in Elementary District Lines.
2. The transfer of 210 students from Buckingham Junior High School, the only predominantly Black junior high.
3. The placing of a ninth grade exploratory program at Putnam (the Vocational Technical High School)
4. The phasing out of Grades 5 and 6 at Homer and Tapley, both substantially Black schools, and transporting those students to predominantly white schools.
5. Planning for additional construction at North Branch (Lynch) and Pottenger Elementary Schools, both substantially white.
6. The appointment of a Director of School Community Relations.
7. The proposed development of an experimental school.

A "Third Plan" was approved for implementation in 1968-69, and in addition to the provisions of Plans I and II, it provided for an addition to Kiley Junior High School and the complete closing of Buckingham Junior High School.

The three plans together accomplished the closing of three Black elementary Schools, the redistricting of Black students (mostly in Grades 5 and 6) to white schools, the beginning of the construction of New North and several additions, the establishment of open enrollment and other volunteer programs of school attendance including the METCO Program for Black children in the suburbs, and the proposed establishment of an experimental school.

The major desegregation methods employed were school construction and consolidation, some reassignment and some volunteerism. A progress report dated March 7, 1969 was accepted by the Massachusetts Board of Education on July 22, 1969.

Late in 1970, the construction aspects of the Springfield School Committee's 1970 plan came under attack from members of the Black community. They felt that the proposed construction sites were unacceptable as they placed an unequal busing burden on Black families. But the School Committee in December signed contracts with local architectural firms for the construction of elementary school complexes according to the plan.

To prevent the Springfield School Committee from further acting on its construction plans, parents from Tapley and Brookings schools filed suit against the School Committee (Maness vs. Springfield School Committee) seeking a temporary restraining order and a declaratory judgment on the constitutionality of the plan. Judge Murray denied the order, citing that the Board had already asked the School Committee to develop a new long-range plan.

To facilitate the plan of construction the School Committee employed the assistance of the Educational Planning Associates . They were also to coordinate construction with desegregation efforts. They completed their study in early

January 1972. Known as the Clinchy Plan, it envisioned dividing the city up into quadrants, each containing a segment of Springfield's Black community. Largely voluntary in nature, the plan suggested a lottery to select in an equitable manner the children who will get their first choice (of schools). The philosophy behind lotteries, however suggests winners and losers and was not universally welcomed.

The School Committee received the Clinchy Plan but failed to accept or act upon it. The Massachusetts Board of Education, in reviewing this action, decided that the progress being made by Springfield was not substantial and ordered the Commissioner to withold funds. The following excerpt from Chapter 641 was cited:

> If, following notification from the Board of Education that racial imbalance exists, a school committee does not show progress within a reasonable time in eliminating racial imbalance in its schools the commissioner of education shall not certify the amount of state aid for such city or town, and the School Building Assistance Bureau shall not approve any project for school construction for such city or town.

The School Committee sued for those funds. The orders emanating from the resultant court case in 1972 were that the state should restore all state aid and that the Springfield School Committee should establish a short-range integration plan for implementation in September 1973.

The Six District Desegregation Plan (SDDP) was presented to the Springfield School Committee on November 30, 1972. The School Committee did not accept the SDDP, holding that plans from 1966-68 were the accepted plans. In August, 1973, the State's Task Force on Racial Imbalance held hearings on the SDDP, and on May 1, 1974, the full State Supreme Judicial Court ordered the SDDP implemented in September, 1974.

On July 26, 1974, Governor Francis Sargent signed into law a bill amending Chapter 641, the Racial Imbalance Act. The amendments prohibited the State Board from ordering the use of busing to achieve balance. One week later, the School Committee, taking the position that busing could no langer be required in Springfield, asked the Supreme Judicial Court to vacate its May 1 order. The committee also passed two resolutions:

1. That the Springfield school system open on September 4 with the same grades and school organization as existed in June, except for such adjustments as may be deemed necessary by the School Committee.
2. That no further action be taken on the timetable for implementing the six-district plan without the specific approval of the School Committee.

On August 15, Justice Kaplan ordered implementation of the racial balance plan to continue, denying the Committee a temporary halt. One week later, a full bench denied the Committee's request to vacate the Court's May 1 order calling for the implementation of the SDDP in September.

After many hours of facilities preparation, public information dessemination (some meetings of which were heated), parental letters, and staff meetings, the SDDP began operating on September 16, 1974.

Desegregation Plans

The easiest way for public schools to achieve desegregation is to have the neighborhood population integrated. Open or varied housing in all neighborhoods can lead to a permenently integrated school system. Generally, only small communities have achieved desegregated schools in such a manner. Larger cities seem to have developed neighborhoods along cultural, ethnic, or racial distinctions.

A second desegregation method is voluntarism where students of one racial or ethnic group agree to attend another school with other racial or ethnic groups. White pupils volunteering to attend previously Black schools and vice-versa can achieve an integrated system, but, unfortunately, only a small percentage of students volunteer. Springfield has sent up to 168 Black students a year to suburban schools at state expense, representing about two percent of the Black school population.

The third desegregation method is an administrative action to redefine an attendance area. Often school districts are defined by natural boundaries, such as highways or rivers or railroads. These boundaries also serve to mark housing patterns so that children attending a school on one side of such a boundary may be of one racial group while children on the opposite side may be of another racial group. Redefining attendance area across such boundaries can produce desegregated schools on both sides. However, all too often Black schools are literally surrounded by other Black schools and share no boundary with a white school where redifinition will produce desegregation.

A fourth method is consolidation. Closing a Black school and reassigning pupils to other schools, primarily white, will result in desegregation. The unfortunate side effects of closing any school may result in community upheaval. A variant is to close both a Black and a white school and assign both student bodies together in a new or magnet school to a neutral area, if one can be found.

A fifth method is grade restructuring in which certain schools are reserved for specific grades. If the elementary population is one third Black, assigning pupils from one Black and two white schools to one of the schools for grades 1-2, another school for 3-4, and the third for 5-6 will result in desegregation for all three schools. The result will be very homogeneous schools in terms of age; some will have no older "models" while others will have all of the "preadolescents".

Also, because Black schools may be surrounded by other Black schools, conbining may require the schools to be widely separated geographically.

A sixth method is arbitrary assignment based on pairing, clustering, or chance. In this plan, both white and Black students are assigned to other schools until desegregation is achieved. All schools maintain their same grade structure and educational characteristics. Under this method a minimum number of students are transferred, and a reasonably large group of students, more than likely white students, would be unaffected. For example, clustering one 600 pupil Black school with two 600 pupil white schools mandates that 400 pupils be assigned out of the Black school to achieve a two thirds white to a one third Black ratio, to be replaced by 200 pupils from each of the white schools. Which 200 will go? Which 400 white pupils will remain in each white school?

The Six District Desegregation Plan (SDDP)

The SDDP grouped the thirty-six elementary schools in Springfield into six enlarged districts, five of which contained one of the predominantly Black isolated schools. In each district one or two upper elementary, Grade 5-6 schools were created with the remaining schools serving Grades 1-4. Kindergartens were unaffected. The sixth district continued in its former grade structure pending the opening of the New North Community School in September, 1975. There were relatively few Black students in District VI, rather, there were many Hispanic students.

In each of the five participating districts, all students in Grades 5-6 attend one or possibly two upper elementary Grade 5-6 schools. Children in Grades 1-4 attend (in almost all cases) the nearest elementary school. Students who would have been in Grades 1-4 in the newly created Grade 5-6 schools were distributed in neighborhood groups to the elementary, Grade 1-4 schools in that enlarged district.

Each of the five participating districts contained between five and eight elementary schools in a pattern that also included a mixture of socioeconomic conditions. The SDDP allowed kindergarten pupils to remain in their neighborhood schools and permitted most elementary school children to attend their neighborhood school for part of their elementary school experience, either K-4 or K,5-6. A total of 5,791 pupils were bused, including 3,689 white pupils and 2,102 Black pupils.

The SDDP was drawn up in 1974 in full knowledge of the Massachusetts Supreme Judicial Court decision regarding School Committee of Springfield vs Board of Education and the ensuing recommendations. To the extent possible consideration was given to not only eliminating racial imbalance, but also providing quality integrated education, maintaining pupil safety, and retaining existing neighborhoods.

This study focused mainly on District III consisting of Homer, Glickman, Freedman, Talmadge, Brunton, and Sixteen Acres Schools. The basic plan for desegregation was also followed in Districts I, II, IV, V and VI. Certain choices were necessarily made to insure that all of the aims stated above were considered. The SDDP assigned one or two schools in a district as Grade 5-6 schools and the others as Grade 1-4 schools. Students within District III would attend one school for Grades 1-4 and another for Grades 5-6. Freedman and Glickman were chosen as the Grade 5-6 schools primarily for the space available jointly, and their central location in the district.

District III was the least densely populated district and the district with the greatest potential for growth. While the limit of 3500 students in the district was preserved for school year 1973-74, future years saw the enrollment exceeding 3500 students. Enrollment decline has generally not effected District III as profoundly as other districts.

District lines were constructed to include one racially imbalanced school. In District III, Homer was segregated prior to 1974, reaching a peak non-white proportion of .8608 in 1973.

While the distance to be traveled between points within the district was not limited by law, the maximum distance that had to be traveled was less than three and one half miles (3.4), and was traveled in less than a quarter of an hour. An average walker travels one mile in twenty minutes.

Pupil assignments were made by street identification with the intent of maintaining neighborhood integrity. While pupils in Grades K, 5, and 6 may not be attending with siblings in Grades 1-4, children in the same grade who lived in the neighborhood generally attended the same schools.

While the decision to utilize a Grade 5-6, 1-4 structure resulted in more students being moved than in other methods of desegregation, the method created a very stable plan in that the whole of District III would have to be imbalanced before any school within District III would be imbalanced. The students bused to Homer would have to be non-white to imbalance Homer.

The two grade 5-6 schools in District III, Freedman and Glickman, have four kindergarten rooms and 26 classrooms between them. The enrollment prior to desegregation (October 1, 1973) exceeded 700 in a regular K-6 elementary program as shown in Table 2.

Insert Table 2 about here

Table 3 outlines the Grade K-6 enrollment of the proposed Grade 1-4 schools. The total number of students to be served by Freedman and Glickman was the total of all Grade 4 and Grade 5 students in District III. That number (931) exceeded the capacities of Freedman and Glickman.

Insert Table 3 about here

Construction of additional space at Glickman for an additional 30 students was planned but not implemented. The gymnasium at Glickman was converted into a four classroom open space.

The SDDP called for allowing all students in the Grades 1-4 schools to attend their schools through Grade 4 and to bus into those schools all Grade 1-4 students who live in Grade 5-6 areas. The initial assignment of pupils in Grades 1-4 in District III was complicated by the fact that a number of students were out of District III because of earlier desegregation efforts. Some students residing in the Homer area attended Armory, Howard and other non-District III schools.

The assignment of students to Homer by the SDDP resulted in overcrowding and a larger than desired percentage of non-white students. To solve the later problem some Grade 1-4 students were assigned to Brunton. In the first year, a total of 122 students, residing on nine streets in the Homer area, attended Brunton. Students on those streets have attended Brunton ever since. Some Homer area students also attended Sixteen Acres and Talmadge Schools. To solve the former problem, the Learning Disability Center, housed at Homer, was moved to the School Street School resulting in five additional classrooms being available at Homer, giving the needed capacity.

Almost all students reassigned by the SDDP needed to be transported within District III. Of the 3427 students in District III assigned under the SDDP, 1512 (44%) were given transportation. In increasing the number of pupils transported, some considerations for safety were needed. During the four years 1968-1971, only fourteen accidents involving school buses were reported out of a total of 10,421 reported accidents. In fact, the percentage of school bus accidents has dropped

while the total number of accidents has increased. Less than 2/10 of one percent of accidents involved a school bus. None of the fourteen accidents involved another vehicle and nine involved property damage only. In addition, five accidents were reported of children falling while getting on or off a bus.

By contrast, 31 children reported having accidents going to or from school while walking. Many children are transported to school solely for reason of safety.

What effect has all of this reorganization and desegregation had on the achievement of Black students?

Desegregation and Achievement

Crain and Mahard (1979) have asserted that much of the desegregation-achievement research done to date has had almost no impact upon American desegregation policy. Instead, the history of a research project on this topic goes roughly as follows: first, the researcher studies desegregation in one school district, in an effort to determine whether test scores of desegregated students increased or not. Using any of a variety of more or less sophisticated methodological tricks, he or she winds up concluding that desegregation did or did not succeed in raising achievement test scores.

St. John (1970) suggested that longitudinal studies of school desegregation should involve the testing of a sample of subjects who are transferred from segregated to desegregated schools and a control group who are not. In order for the comparison between transferred and control subjects to be a valid test of the effects of desegregation upon pupil achievement, three assumptions must be met. First, transferred and control subjects must be equivalent at the outset of the study in terms of factors such as IQ, socioeconomic status, and age. Second, the school programs must be able to hold a large majority of the original subjects throughout the course of the study. And, third, the control schools must have an

educational program equivalent, except for racial composition, to that of the receiving schools.

The present study differs appreciably from the scenario by asking if the achievement of Black students who participate in desegregation by leaving their neighborhood to be bused to another school several miles away differs from Black students who also participate in desegregation by attending their desegregated neighborhood school, desegregated by white students who are bused in from other neighborhoods.

Many studies of busing (Armor, 1972; Bradley and Bradley, 1977) actually were studies of desegregation where a non-equivalent control group remained in a segregated situation. Some of the desegregation studies compare Black vs white achievement, some compare Black achievement before and after desegregation, and some compare Black achievement in a desegregated vs segregated situation. These studies have shown desegregation to have an inconsistent effect on Black student achievement, many because the assumptions outlined by St. John (1970) were not met.

Almost no research has been done to discover the effects of busing on achievement when both the bused and non-bused Black students were experiencing a desegregated situation.

Carrigan's study (1969) of desegregation in Ann Arbor, Michigan Public Schools compared to the achievement of Black students who were transported from a predominantly white school to the achievement of Black students who were attending an integrated neighborhood school. The results favored the control students. However, at the point in time when Black students were being bused to formerly white schools, white students were not being similarly assigned to the control school. There was no interruption in the control school where there had been contact between races for some time.

The latter two variables, interruption and constant cross-racial contact, have been previously associated with achievement. Crain and Mahard (1979) reported that there is often a large change in achievement in both directions following an interruption due to desegregation. They suggested that "when students change schools for purposes of desegregation we can expect a much more irregular pattern of development with sharp losses and sharp gains." (p.5) For just such a reason the present study was delayed until the participants had had at least two to three years experience with a desegregation classroom. Bradley and Bradley (1979) noted that "the length of time Black students at all school and family class levels were

exposed to desegregated classes was found to be positively related to their verbal ability scores." (p.406)

The main findings of desegregation studies reported by Roberts (1978) was that "black youngsters do much better if they begin going to desegregated schools early." This study concentrated on elementary school desegregation.

Black achievement also seems to be enhanced when formerly Black schools are desegregated by the enrollment of white students. However, the major risk of busing white students to formerly Black schools is "white flight".

An earlier attempt by the author to evaluate the effects of busing on achievement resulted in a finding of no difference. Table 4 shows the average achievement of students at Ells and Brookings schools between 1970 and 1975. Both Ells and Brookings were predominantly Black schools through school year 1973-74. The "normal" achievement of students at those schools was average or below in Grade 3 and about five months behind the city average by Grade 6. Students at Ells and Brookings gained between two and five months less than the city average during both periods 1970-73 and 1972-75.

Insert Table 4 about here

After the implementation of the SDDP in 1974-75 the students were still four to five months behind in Grade 6 even though those who remained at Brookings were not bused. The Gain over the period 1972-75 was the same as the gain over the period 1970-73 for both schools eventhough the overall city gain was less.

The method employed in the present ex post facto non-equivalent control group design examined the official registers of Homer and Brunton schools to identify by name the students who live on the streets in the Homer area who were selected to attend Brunton and Homer. The streets were selected in accordance with the SDDP which assigned students to schools on the basis of street addresses. The academic achievement was determined by locating the test results of the named students on the reports made to the school system by the scoring service of the CTBS. The Total Battery Scale Score was chosen as the dependent variable of the study.

Students were pooled over the two school years 1977-78 and 1978-79 and were included only if they were enrolled for at least two years at their respective schools.

The great difficulty in performing studies of comparative achievement in Springfield is that the race is not known. Achievement is reported to the system by

name without any racial code and reported racially by classroom, school, and system. Thus, all of the findings in this study must be interpreted in light of the fact that all racial comparisons are based on proportionate inferences.

The strength of that inference, however, is shown on Table 5. The proportion of students living in the Ells, Brookings and Homer districts who are Black is reflected in the kindergarten racial census since kindergarten children attend their neighborhood school.

Insert Table 5 about here

While not everyone living on the selected streets in the Homer district is Black, about 85% of all of the students living in the Homer district are Black.

Results

The results, shown in Table 6, indicate that the students who walk to Homer School and who have attended the school for at least two years have significantly higher achievement scores when adjusted for their expected scores than students who have been transported to Brunton for at least two years.

Insert Table 6 about here

The results were obtained from an analysis of covariance where the expected score, obtained partially from the Short Form Test of Mental Maturity, which was administered almost simultaneously with the Comprehensive Test of Basic Skills, was used as the covariate. The adjusted mean difference was significant as shown in Table 7.

Insert Table 7 about here

Discussion

In all non-equivalent control group designs the bias of selection can account for differences between the groups. How similar were the two groups?

The selection was made in accordance with the SDDP and logically should not correlate with achievement. In addition, the proportion of white students who may have been classified as Black should be the same in each sample.

While more students were transported to Brunton than walked to Homer, Table 8 reveals that both had about a six percent rate of absenteeism.

Insert Table 8 about here

It is possible that attending school with a higher proportion of white students has a positive effect on achievement. Table 9 shows a relatively even distribution of Black students within the fourth grades of each school with perhaps a slightly higher percentage of white students in Grade 4 at Brunton.

Insert Table 9 about here

Perhaps the achievement at Homer School exceeds that of Brunton overall. Table 10 shows the school average for each race for each year. The average achievement of Black students at Homer was identical to that at Brunton over the two years studied (3.8). White achievement at Brunton actually exceeded that of Homer (4.7 to 4.6)

Insert Table 10 about here

More subjective comparisons of the two schools suggested that both schools have similar types of leaders and similar overall curriculum. Homer is an older building and does receive supplementary services from Title I. Brunton uses supplementary funds from the State Racial Imbalance Act, Chapter 636.

There may be factors as yet uncovered or obvious to the reader that may account for the greater achievement of walking students to those being bused, beyond the fact of busing.

Whatever the cause, the results suggest that Black student achievement can be improved by having Black students walk to their neighborhood school that has been desegregated by having white students bused in from other neighborhoods rather than busing Black students to predominantly white schools.

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Foctnote

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Table 1

Proportion of Races and Percent Change Before and After the SDDP

Oct. 1	White	Change	Black	Change	Spanish Surnamed	Change
1968	.7639		.1992		.0369	
		-2.06		+1.33		+0.73
1969	.7433		.2125		.0442	
		-2.63		+1.24		+1.39
1970	.7170		.2249		.0581	
		-2.26		+1.30		+0.96
1971	.6944		.2379		.0677	
		-1.93		+0.99		+0.94
1972	.6751		.2478		.0771	
		-2.64		+0.88		+1.76
1973	.6487		.2566		.0947	
		-2.49		+0.60		+1.89
Average		-2.34		+1.06		+1.28
1974	.6238		.2626		.1136	
		-2.30		+0.33		+1.97
1975	.6008		.2659		.1333	
		-1.20		+0.64		+0.56
1976	.5888		.2723		.1389	
		-2.43		+0.93		+1.50
1977	.5645		.2816		.1539	
		-1.55		+0.32		+1.23
1978	.5490		.2848		.1662	
		-1.60		-0.04		+1.64
1979	.5330		.2844		.1826	
Average		-1.82		+0.44		+1.38

Table 2
Enrollment in October, 1973

School	K	1-3	4	5	6	1-6
Freedman	58	206	60	68	76	410
Glickman	42	139	52	45	58	294
Total	100	345	112	113	134	704

Table 3

Enrollment in October, 1973

School	K	1-3	4	5	6	1-6
Homer	117	371	104	123	125	723
Brunton	81	201	71	70	65	407
16 Acres	122	331	109	90	81	611
Talmadge	89	211	67	72	66	416
Total	409	1114	351	355	337	2157

Table 4

Comparative Grade Equivalent Achievement of Black Students on Total Battery Score of the Iowa Test of Basic Skills

	1970 Gr. 3	1973 Gr. 6	Years Gained	1972 Gr. 3	1975 Gr. 6	Years Gained
Ells	3.5	5.4	1.9	3.3	5.2[1]	1.9
Brookings	3.8	5.4	1.6	3.5	5.1[2]	1.6
City Average	3.8	5.9	2.1	3.8	5.6	1.9

[1]Black students bused to Myrtle for desegregation.

[2]Black students remained; whites bused.

Table 5

Percent of Black Kindergarten Children

School	1974	1975	1976	1977	1978	1979
Brookings	69.8	75.2	66.3	57.7	53.7	40.6
Brunton	1.6	1.7	3.9	4.5	4.8	6.2
Ells	89.3	89.7	92.1	91.5	88.1	92.9
Homer	79.8	82.5	84.9	84.4	84.8	85.7

Table 6

Mean Total Battery Scale

Scores from the Comprehensive Test of Basic Skills

School	n	Scale Score	Variance	Anticipated Scores	Adjusted Score
Homer	32	380.3	2444.28	377.3	369.4
Brunton	65	350.8	1616.60	355.1	356.2

Table 7

Analysis of Covariance Summary Table

Source	df	Mean Squares	F-ratio
Between	1	3581.9	6.664*
Within	94	537.5	

*Significant at .05

Table 8

Attendance

School	Year	Number	Absences	Membership	Proportion
Homer	1977-78	20	12.0	175.5	.068
Homer	1978-79	12	4.3	151.4	.028
Homer	1977-79	32	9.1	166.5	.055
Brunton	1977-78	33	11.4	176.8	.064
Brunton	1978-79	32	8.7	169.4	.051
Brunton	1977-79	65	10.1	173.1	.058

Table 9

Proportion of Black Students in Grade 4

Year	Brunton	Homer
1974	.39	.32
1975	.41	.30
1976	.36	.46
1977	.41	.41
1978	.32	.48
1979	.40	.48
Average	.38	.41

Table 10

Comparative School Achievement in Grade Equivalent Scores

Year	Brunton Black	Brunton White	Brunton Total	Homer Black	Homer White	Homer Total
1977-78	3.9	4.6	4.3	3.9	4.7	4.3
1978-79	3.6	4.7	4.3	3.7	4.4	4.1
Average	3.8	4.7	4.3	3.8	4.6	4.2